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Abstract

This paper models a purely informational mechanism behind the incumbency advantage. In a two-period electoral campaign with two policy issues, a specialized incumbent and an unspecialized, but possibly more competent challenger compete for election by voters who are heterogeneously informed about the state of the world. Due to the asymmetries in government responsibility between candidates, the incumbent's statements may convey information on the relevance of the issues to voters. In equilibrium, the incumbent sometimes strategically releases his statement early and thus signals the importance of his signature issue to the voters. This gives rise to the incumbency advantage. We find that, since the incumbent’s positioning on the issue reveals private information which the challenger can use in later statements, the incumbent's incentives to distort the campaign are decreasing in the quality of the incumbent, as previously documented by the empirical literature. However, we show that this implies a non-monotonicity in the distortions that arise in equilibrium.

JEL-Code: D720, D820, D600.

Keywords: incumbency advantage, electoral competition, information revelation.

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1. Introduction

> "We have alarming news from the Middle East. There is talk of a war. [...] Germany is willing to show solidarity, but is not available for adventures."
>
> — German Chancellor Gerhard Schröder, August 1st, 2002

With this statement, the German chancellor took a very popular position against the participation in an armed conflict and put the Iraq issue on the political agenda for the election on September 22nd, 2002. Only hours earlier, the council meeting of his Social Democratic Party had decided to immediately start, earlier than planned, the final phase of the election campaign. At the time, economic problems of unemployment and recession put the incumbent coalition of Social Democrats and Greens under pressure. In polls, they were clear second behind the conservative opposition. Within one month of the above statement, the perceived importance of the Iraq conflict jumped from 6th to 2nd rank although it was very uncertain that a war would ever be fought and German support ever requested from the US (Fürtig, 2007). The September elections saw the incumbent coalition confirmed.

This example shows vividly the incumbent's strength in shaping the political agenda – the perception of relevant issues – and influencing the campaign election. Our paper offers a purely informational explanation for the empirically established phenomenon of incumbency advantage. In our model, an incumbent, when competing against a challenger candidate for reelection, can credibly signal the relevance of an issue to the voters because of government responsibilities that force him to act on problems that have a particularly urgent and relevant nature. He can also use this ability to make those issues salient on which he is particularly competent. The flipside of this government responsibility is that an important issue might require immediate political action and force him to position himself. As a consequence, the challenger can position himself optimally in response to the incumbent's action. This trade-off between influencing the agenda and revealing information governs the analysis of campaign statements in this paper.

We model this trade-off in an electoral campaign over two periods with two political issues. The first period of the campaign is the last period of the incumbent government in which the incumbent might position himself before the challenger does so in the second period, the proper election period. The political agenda is reflected by one "relevant" issue being more important for the country than another and solely affecting the voters' utility. The identity of the relevant issue and the state of the world on each issue are uncertain and voters and candidates are heterogeneously informed about them.

Some relevant issues are "urgent" and require immediate attention of the incumbent in the first period. His actions in the first period are thus sometimes informative about the relevant issue. The incumbent is specialized in one issue and might raise his election probability by influencing the voters' beliefs in favor of this issue's relevance.

Due to the trade-off, in equilibrium it is not optimal for an excellent incumbent to reveal his precise information and influence the electorate's political agenda. In other words, the returns to incumbency are decreasing in the quality of the incumbent. This is in line with the findings of the empirical literature; Aidt et al. (2011) show how the incumbent's opportunistic behavior that distorts the electoral campaign diminishes when the incumbent's win-margin increases. Gordon and Landa (2009) provide a survey of models in which high quality incumbents benefit less from the incumbency advantage, with the best incumbents potentially suffering from incumbency.

Our model shows that this result does not translate in a monotonically more efficient outcome. The challenger mimics the incumbent only when his information and thus quality is good enough. A challenger that mimics rather than challenges is not providing the voters with alternatives, so that a better informed incumbent does not necessarily result in better options. The inefficiencies that arise from the incumbent's and the challenger's behavior are non-monotonic in the incumbent's quality: they are highest when the incumbent is of intermediate quality, and lowest when his quality is very high.

Our model is related to two different branches of the literature. The first one is the wide literature on the incumbency advantage. The common explanations for such an advantage can be grouped in three categories: (i) Environmental characteristics of the campaign that make the campaigning process easier for the incumbent. For example, Prior (2006) assumes a greater media coverage for the incumbent. (ii) Incumbent's characteristics that differ from the challenger's ones through the selection process of the previous election. For example, Ashworth and de Mesquita (2008) model how a quality-based incumbency advantage endogenously arises through electoral selection and strategic challenger entry. (iii) The incumbent's position provides opportunities he uses in his favor. Examples would be an increased constituency service (Fiorina, 1977) or redistricting (Cox and Katz, 2002).

The rationale that we provide for the existence of an incumbency advantage falls in the latter category. The incumbent is able to actively distort the electoral campaign in order to increase his chances of being elected. The model that is closest in spirit to ours is by Hodler, Loertscher and Rohner (2010). They consider the pre-election implementation of inefficient policies that later increase the pressure to act on the incumbent's signature issues. While they investigate under which circumstances the chosen quality of a policy is low, our model views the chosen timing of campaign statements as instrumental in the agenda-setting. To the extent that politicians cannot freely choose low quality policies, our model provides a more widely applicable mechanism of agenda setting.

A second related branch of the literature considers agenda setting and the timing of statements. Petrocik (1996) introduced the view that the perceived competence of a politician in a particular field ("issue ownership") is relevant for his success. Abbe, Goodliffe, Herrnson and Patterson (2003) modeled how politicians' success depends on whether their core competencies are "high on the agenda". Our setup is inspired by these concepts; we model the agenda by issues' true relevance for the voters and the competency of the candidates by the precision of their information.

Section 2 introduces the general features of the model. The analysis of the equilibria is contained in section 3. Section 4 analyzes the situation of information asymmetries between voters and candidates regarding the competencies. Section 5 contains an analysis of the distortions that the incumbency advantage may induce. Section 6 concludes.

2. The model

We consider a two-period model in which an incumbent I and a challenger C compete to be elected by a continuum of voters after a two-period electoral campaign on issues a and b. The optimal policy on each issue $j = a, b$ is equal to the state of the world on that issue, $\omega_j \in \{-1, 1\}$, where both states are equally likely. The state of the world on each issue is unknown during the campaign, and voters and candidates are heterogeneously informed about ω_j.

Voters. There is a continuum of heterogeneously informed voters. Each voter's utility is affected only by the policy implemented on one of the issues, which we call the "relevant" issue. The identity of the relevant issue is ex-ante unknown; the prior probability that issue a is relevant is r, which is a public signal drawn from a uniform distribution over $[0, k]$ with $\frac{1}{2} < k < 1$. Having $k > \frac{1}{2}$ ensures both issues to have a positive probability of being perceived as "more likely to be relevant". The probability that a is the more relevant issue, however, is $\frac{2k-1}{2k} < \frac{1}{2}$, therefore, the two issues are asymmetric from an ex-ante perspective. On top of the public signal, each voter i receives two private signals v^i_j, $j = a, b$, about issue j's state of the world, where $v^i_j = \omega_j$ with probability $q > \frac{1}{2}$; signals are independent across voters and issues. Voter i receives his signals r, v^i_a and v^i_b when he is about to decide his electoral behavior.

Given his signals, each voter follows a simple behavioral rule. At the time of the election he votes for the best candidate on the issue that he views more likely to be relevant.[1] If both candidates propose the same policy on that issue the voter randomizes with equal probability between the two candidates.

Candidates. There are two candidates, an incumbent I and a challenger C. Candidates maximize the probability of being elected by taking one of two positions $p_j \in \{-1, 1\}$ on each issue.

Candidates are asymmetric in three ways. First, at the beginning of period 1 each candidate receives signals on the state of the world with different precisions. The incumbent's signal on issue j is $s_j \in \{-1, 1\}$ and the challenger's is $t_j \in \{-1, 1\}$. C's signal t_j is correct with probability $\delta_j = \frac{2}{3}$ for both issues, reflecting that he is not specialized on any issue.[2] I's signal on b is marginally informative, $\gamma_b = \frac{1}{2} + \varepsilon$. I is specialized on issue a, due to a signal with $\gamma_a > \frac{1}{2} + \varepsilon$. Consequently, the incumbent can have an objectively worse ($\gamma_a < \frac{2}{3}$) or better ($\gamma_a > \frac{2}{3}$) signal than the challenger on issue a.[3]

Second, while both candidates can make statements in the second period, the proper election campaign, only the incumbent can take a stand on the different issues in the first period. This can be thought about as the last government period, in which he can propose or implement a policy on one of the issues.[4] Every politician can take a stand on each issue only once because they effectively commit to the proposed policies.

Finally, with probability z the relevant issue is "urgent". Then, it is the incumbent's government responsibility to act immediately on a given issue. This puts a restriction on the incumbent's set of feasible strategies such that he has to act on the urgent issue by announcing p_j^I in period 1. Urgency is a characteristic that only relevant issues can have. Due to his position, the incumbent gets to know whether there is an urgent issue

[1] This is clearly a strong assumption. However the model in this case can be seen as a reduced form of a model in which voters have limited ability to process the information, and can only evaluate one issue at the time; if the relevant issue has a sufficiently heavy weight in their utility function, they will base their vote on the issue that is more likely to be relevant. Overall, this is a stark but useful reflection of the nature of a political agenda.

[2] The specific value of δ_j is chosen to simplify the analysis of the equilibrium threshold. The crucial point here is that the challenger's precision is the same on both issues.

[3] The model can easily be extended to the case of a specialized challenger. This delivers no further insights as most of the strategic behavior comes from the incumbent. The case of an unspecialized incumbent, instead, is not relevant for our analysis, as it displays no incentive at all for the incumbent to influence the voters' perception of the issues.

[4] This is without loss of generality. As will be clear from the description of the model, the challenger has no extra information on the issues' relevance that can induce the voters to update their beliefs. Therefore an early announcement by the challenger would simply reveal his strategic position to the incumbent, without changing the probability that the election focuses on a specific issue.

and which issue it is through an extra private signal $\zeta \in \{a, b, \emptyset\}$.[5]

Therefore the challenger's strategy maps from the signal space into the action space

$$\sigma^C : \{-1, 1\}^2 \to \{-1, 1\}^2,$$

associating a pair of promises (p_a^C, p_b^C) to the pair of signals (t_a, t_b).

The incumbent's action space is instead $\{A, B, \emptyset\} \times \{-1, 1\}^2$, where A and B indicate the choice of promising p_a^I or p_b^I, respectively, in the first period, and $\emptyset$ the waiting until the second period. With the signals on the states of the world and the urgency, the incumbent's strategy is

$$\sigma^I : \{a, b, \emptyset\} \times \{-1, 1\}^2 \to \{A, B, \emptyset\} \times \{-1, 1\}^2,$$

where the following restrictions from urgency apply:

$$\sigma^I(a, s_a, s_b) \in \{A\} \times \{-1, 1\}^2,$$
$$\sigma^I(b, s_a, s_b) \in \{B\} \times \{-1, 1\}^2.$$

No restriction applies to $\sigma^I(\emptyset, s_a, s_b)$.

Updated relevance. The voters update the probability r according to the incumbent's behavior. The updating is induced by the possibility that the relevant issue is urgent, in which case observing a promise on issue j in the first period is informative about its relevance.

Consider issue a. The voters' prior belief that a is more likely to be relevant is $\frac{2k-1}{2k} > 0$. With z being the probability that the relevant issue is urgent and y the probability that a is spoken about in equilibrium when there is no urgency, the posterior belief becomes via Bayes' rule

$$\rho = \frac{(z + y(1-z))r}{(z + y(1-z))r + (1-r)(1-z)y}.$$

If ρ is greater than $\frac{1}{2}$ the voters base their decision on issue a, which occurs when $r > \frac{(1-z)y}{2y-(2y-1)z}$.

[5] We interpret this sharp constraint implied by the urgent issues as follows. If the incumbent remains inactive on that issue, its urgency will be revealed to the voters, and the incumbent will not be elected in the subsequent election as a punishment for the absence of timely measures. By the nature of urgency, politicians cannot hide an urgent issue from the public, while they can make believe that an issue is urgent. For example, in the case of a potentially pandemic flu, the government can promote a plan of vaccinations and a set of restrictive measures to protect the country. Now, if the people get the vaccine, they cannot know for sure whether it was really a critical situation or not; on the contrary, if the government does not adopt any special measure and the flu spreads quickly, everyone will know that the government failed to act on time. To understand the difference between relevance and urgency, consider the relevant issue being the reform of the pension scheme. This could mean that the ageing of the population requires a reform over the course of the new government. It could also mean that sovereign debt is so high that the pension scheme needs to be changed immediately to obtain feasible refinancing conditions. The first example is of a relevant but not urgent issue, the second one of a relevant and urgent issue.

Timing. Figure 1 summarizes the timing of the electoral campaign. At the beginning of the first period the incumbent and the challenger receive signals (ζ, s_a, s_b) and (t_a, t_b), respectively. In the first period, the incumbent decides whether to promise p_a^I, p_b^I or nothing, where his choice is constrained in the case of an urgent issue. All other promises are revealed in the second period, the electoral campaign period. In period 3, r, ω_a and ω_b are revealed, and the voters cast their vote.

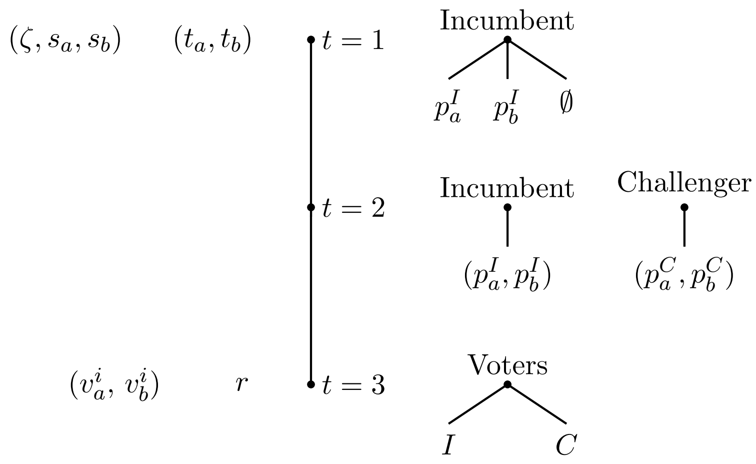


Figure 1: Timing of the electoral campaign.

3. Equilibrium analysis

In the election game described above, there are two elements that influence the voters' choice: the issue they perceive as most likely to be relevant and the candidate that proposes what they believe to be the optimal policy on that issue.

Remark 1 *If the incumbent chooses $\emptyset$ in the first period, it is a dominant strategy for both candidates to follow their own signals in the second period.*

When nothing is said in the first period, the voters' belief on issue relevance is independent of the policies chosen by the candidates in the second period. Moreover, all voters hold the same beliefs on the relevance of the issues and thus vote on the same issue j. They also hold informative and independent beliefs on ω_j. The median voter, therefore, holds the correct belief on the state of the world of the issue, $v_{j^*}^m = \omega_j$, where j^* is the issue that is more likely to be relevant. Therefore both candidates maximize the probability of being elected by maximizing the probability that their announcements correspond to the true state of the world. On every issue, the candidates promise the policy that corresponds to their signal; the best predictor of the state of the world they have.

The incumbent's weakly dominant strategy. We showed that promising $p_j^I = s_j$ is always a weakly dominant strategy for the incumbent when both candidates make simultaneous announcements. The following proposition extends this result to the first period promises.

Proposition 2 *When speaking in the first period it is a weakly dominant strategy for the incumbent to promise* $p_j^I = s_j$.

Notice that, if the challenger mimics the incumbent, any strategy is equivalent from the incumbent's point of view, since the probability of winning is $\frac{1}{2}$ regardless of the chosen strategy on that issue. However, if there is a positive probability that the challenger does not mimic the incumbent, the incumbent optimally follows his own signal, $p_j^I = s_j$, thus maximizing the probability of winning on issue j.

The challenger. Given the previous result, consider the challenger's best response when the incumbent proposes a policy p_j^I in the first period and the challenger's believes the incumbent to follow his own signal. The best response will depend on the comparison between the incumbent's and the challenger's precision on the issue, $\gamma_j \gtrless \delta_j$, as stated in the following proposition.

Proposition 3 *When the challenger observes* p_j^I *and believes that* $p_j^I = s_j$*, his optimal promise in the second period is* $p_j^C = p_j^I$ *if* $\gamma_j > \delta_j = \frac{2}{3}$ *and* $p_j^C = t_j$ *otherwise.*

The challenger's statement in the second period does not affect the updated probability of relevance of the issues. The challenger's only aim is to maximize the probability that his promise matches the true state of the world on every issue. In order to do so, he follows the best signal and mimics the incumbent if and only if $\gamma_j > \delta_j$.

Equilibrium behavior. In equilibrium, the incumbent chooses his promises according to his weakly dominant strategy. There is no equilibrium in which I does not follow his signal. If he does not follow his signal and is not mimicked, not following his signal is not optimal. With a precision of $\delta = \frac{2}{3}$ the challenger will mimic the incumbent only when the probability that the incumbent's promise corresponds to the true state of the world is higher. In an equilibrium where the incumbent chooses a pure strategy, this can happen only when the incumbent follows his own signal.

Remark 4 *If $\zeta \in \{a, b\}$, the incumbent is forced to act on the urgent issue. He will promise $p^I_\zeta = s_\zeta$ in the first and $p^I_{-\zeta} = s_{-\zeta}$ in the second period, where $-\zeta \in \{a, b\} \setminus \zeta$.*

When no issue is urgent, the incumbent will never make a promise on b in the first period. Given his very low competence on the issue, he will never be mimicked by the challenger on b. Therefore the only effect of an announcement on b is to increase the probability that b is the issue that is decisive for the electoral campaign, which decreases the probability that I is elected. As for issue a, the incumbent knows that, if he speaks in the first period, the challenger mimics him only when $\gamma_a > \frac{2}{3}$. It follows for $\gamma_a < \frac{2}{3}$ that the incumbent optimally makes a statement on a in the first period, with the consequence that the voters concentrate more on issue a and the probability of reelection increases. When $\gamma_a > \frac{2}{3}$, the incumbent faces a trade-off between the increased probability of voters focusing on issue a, and the loss from revealing useful information to the challenger. The first effect does not depend on γ_a, while the second effect becomes more important as γ_a increases. In equilibrium, the incumbent does not make his promise on a in the first period if he has a very precise signal.

Proposition 5 *Given the challenger's optimal behavior and no urgency ($\zeta = \emptyset$), it is optimal for the incumbent to promise $p^I_a = s_a$ in the first period if $\gamma_a < \Xi$ and to wait until the second period otherwise. The threshold is $\Xi = \frac{(4k-\frac{3}{2})(2-z)-(1-z)}{3(2k-1)(2-z)}$.*

Since $\Xi > \frac{2}{3}$, the equilibrium behavior differs across three regions, depending on the value of γ_a, as represented in Figure 2.

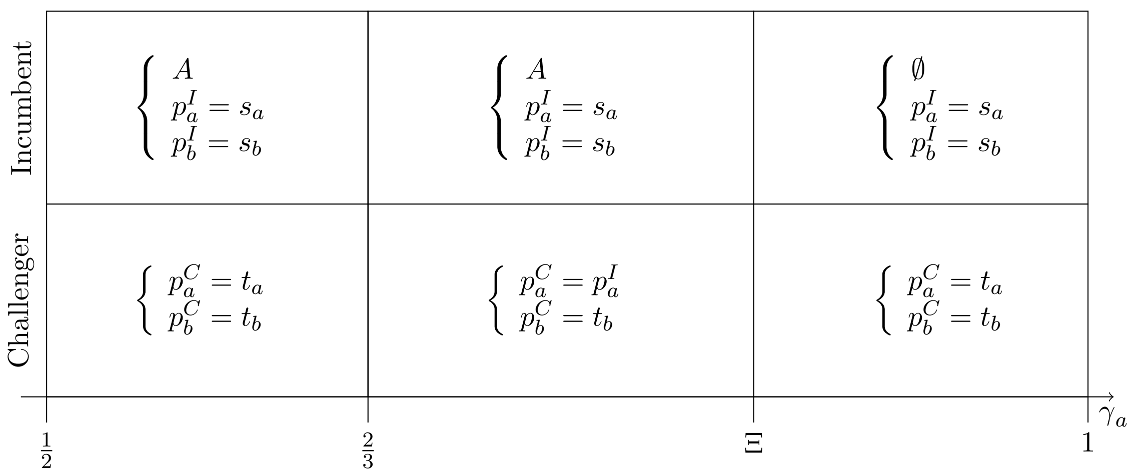


Figure 2: Equilibrium behavior without urgent issue ($\zeta = \emptyset$).

The threshold Ξ is decreasing in k. A higher k increases the ex-ante probability of a being the relevant issue. This reduces the incumbent's desire to distort the voters' beliefs on the relevant issue and increases the relative importance of the informational advantage on issue a that would be lost after an early announcement. Furthermore, the threshold Ξ rises in z. A higher z increases the effect of the early announcement on the ex post probability that a is more likely to be relevant. Thus, the point at which the loss of the informational advantage outweighs this gain is at a higher γ.

4. Unknown specialization

In the previous section we considered the incumbent's levels of precision on both issues to be common knowledge. Further insights can be obtained by relaxing this assumption and letting the extent of the specialization, γ_a, be the incumbent's private information.

We assume γ_a to be a random variable, distributed according to a continuous distribution f with support $\left[\frac{1}{2}+\varepsilon, 1\right]$. It is commonly known that $\gamma_b = \frac{1}{2}+\varepsilon$; therefore it is common knowledge that the incumbent is never more competent on b than on a.

The challenger's behavior can depend only on the distribution of γ_a, not on γ_a itself. If the incumbent does not act in period 1, the challenger's optimal strategy is to promise his signal on each issue, regardless of what he thinks about the incumbent. Moreover, if the incumbent promises p_b^I in period 1, the challenger's best response is to promise $p_b^C = t_b$, given that he knows that $\gamma_b < \frac{2}{3}$. Therefore the challenger's equilibrium behavior differs from the complete information case only in his way of reacting to a first period announcement on a.

Like in the incomplete information setting, the incumbent's equilibrium strategy under no urgency must be characterized by a threshold. This is again caused by the cost of an early intervention on a being increasing in γ_a, while the benefit is constant; therefore the incumbent's strategy will be characterized by a threshold below which the incumbent will promise p_a^I in the first period. As a consequence, if f gives sufficient weight to low competencies so that $E(\gamma_a) < \frac{2}{3}$, the challenger will never mimic the incumbent. In that case all types of incumbents will be active in the first period. If f gives sufficient weight to high competencies, so that the incumbent's expected precision conditional on the fact that he announces p_a^I in the first period is greater than the challenger's precision on a, $(1-z)E(\gamma_a|\gamma_a < \Pi) + zE(\gamma_a) > \frac{2}{3}$, the challenger will always mimic the incumbent. Then, even conditioning on the fact that the incumbent's type is low enough to speak in the first period, the challenger finds the incumbent's signal more reliable in expectation than his own. If f does not satisfy either condition, the challenger mixes between mimicking the incumbent and following his own signal. As a result, more competent incumbents propose a policy p_a^I in the first period, who would find it optimal to be silent if the challenger mimicked p_a^I with probability 1. As a consequence, the expected precision of the incumbent given that he speaks in the first period is increased.

Proposition 6 *For any distribution of γ_a the following holds in equilibrium:*

i. The challenger always promises $p_b^C = t_b$. He promises $p_a^C = t_a$ if there was no announcement on a in the first period;

ii. The incumbent promises $p_j^I = s_j$, $j = a, b$. If $\zeta = j$ he promises p_j^I in the first period; if $\zeta = \emptyset$ he promises p_b^I in the second period.

iii. The timing of the incumbent's announcement on issue a when $\zeta = \emptyset$ and the challenger's behavior when he observes p_a^I in the first period depend on the distribution of γ_a as follows.

$\mathbf{E}(\boldsymbol{\gamma}_\mathbf{a}) < \mathbf{\frac{2}{3}}$. *The incumbent announces p_a^I in the first period and the challenger does not mimic him.*

$(\mathbf{1-z})\mathbf{E}(\boldsymbol{\gamma}_\mathbf{a}|\boldsymbol{\gamma}_\mathbf{a} < \boldsymbol{\Pi}) + \mathbf{zE}(\boldsymbol{\gamma}_\mathbf{a}) > \mathbf{\frac{2}{3}}$. *The incumbent announces p_a^I in the first period if and only if $\gamma_a < \Pi$, where Π is the minimum between 1 and the solution to the implicit equation $\Pi = \frac{(8k-3)[2F(\Pi)-(2F(\Pi)-1)z]-2(1-z)F(\Pi)}{6(2k-1)[2F(\Pi)-(2F(\Pi)-1)z]}$. The challenger mimics him on a.*

$(\mathbf{1-z})\mathbf{E}(\boldsymbol{\gamma}_\mathbf{a}|\boldsymbol{\gamma}_\mathbf{a} < \boldsymbol{\Pi}) + \mathbf{zE}(\boldsymbol{\gamma}_\mathbf{a}) < \mathbf{\frac{2}{3}}$ **and** $\mathbf{E}(\boldsymbol{\gamma}_\mathbf{a}) > \mathbf{\frac{2}{3}}$. *The incumbent announces p_a^I in the first period if and only if $\gamma_a < \Pi'$, where $\Pi' > \Pi$ is such that $(1-z)E(\gamma_a|\gamma_a < \Pi') + zE(\gamma_a) = \frac{2}{3}$. The challenger mimics the incumbent with probability β such that the incumbent is indifferent between speaking in the first and in the second period when $\gamma_a = \Pi'$.*

As described above, the distortions that are present in the unknown specialization case are structurally the same as in the complete information case. However, which specific distortions arise depends not only on the specific value of γ_a but also on its distribution.

5. Distortions arising from political specialization

The framework in which we model the incumbency advantage exhibits distortions in terms of the likelihood of electing a candidate who promises the correct policy on the relevant issue. The benchmark is the case in which both politicians follow their signal, and the incumbent speaks in the first period only when there is an urgency. In this scenario the probability of electing a politician who implements the optimal policy is increasing in γ_a. This is due to the fact that a higher competence increases the probability that a candidate promising the "correct" policy is offered in the election.[6]

We can distinguish three distortions when the incumbent can choose to speak in the first period without real urgency. First, if the incumbent makes statements in the absence of urgency in the first period, he influences the agenda in the sense that he distorts the perception of which issue is most likely to be relevant. The voters will have a distorted expectation of the relevant issue and will not vote optimally, thereby affecting their welfare negatively.

Second, in the simultaneous case the urgency always reveals the relevant issue with certainty. Once the early statement might be due to the incumbent's interest only, the urgency on an issue can not always be recognized. Again, the voters have a distorted expectation of the relevant issue and will not vote optimally, thereby affecting their welfare negatively.

Both these distortions arise in those equilibria in which the incumbent speaks on issue a in the first period and there is no urgency. Since these equilibria arise when γ_a is low, both types of distortions are more likely for low values of γ_a.

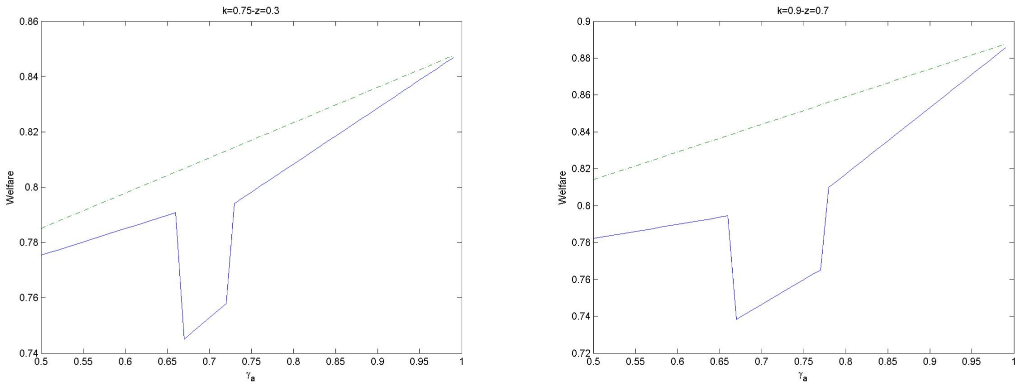
The third effect results from the challenger mimicking the incumbent's statement. The probability that the election offers a candidate who promises the right policy is diminished as a result of the challenger not using the information of his signal. This effect has a positive side as well: due to the mimicking, the probability that the incumbent is elected when the voters vote on issue a decreases, and therefore the probability of having a candidate who implements the correct policy on b increases. However, the overall effect of this distortion is negative. This last type of distortion arises when the challenger mimics the incumbent, and is therefore present for higher values of γ_a.

There are three different regions in which these distortions appear, depending on the value of γ_a.

$\boldsymbol{\gamma_a > \Xi}$. The incumbent only speaks in the first period when there is an urgency. However, if the urgent issue is a, the challenger mimics him. Therefore, the last distortion is the only one present in this region.

$\boldsymbol{\gamma_a < \frac{2}{3}}$. The incumbent makes an early statement on issue a whenever there is no urgency. However, the incumbent never mimics him, so that only the first two types of distortions are present.

[6]The formal analysis is presented in appendix B.1.



(a) $k = 0.75$ and $z = 0.3$ (b) $k = 0.9$ and $z = 0.7$

Figure 3: Probability of electing a politician who promised the optimal policy on the relevant issue as a function of the precision γ_a. The dotted line is the benchmark.

$\mathbf{\frac{2}{3} < \gamma_a < \Xi}$. All distortions are present since the incumbent makes an early statement on a whenever there is no urgency and he gets mimicked by the challenger.

Figure 3 illustrates graphically the probability of electing a politician who proposes the optimal policy on the relevant issue for some values of k and z.[7] In each of the distinct three ranges, the expected welfare is increasing in γ_a. As in the benchmark case, a higher precision of the incumbent's signal improves the possibility to vote for a candidate with the right policy. The impact of the distortions is strong enough to make the expected probability of electing a competent politician non-monotonic in γ_a. The highest expected probability is attained in the region with high competence and only one distortion present. As $\gamma \to 1$ the last distortion vanishes. The lowest expected probability is reached in the intermediate region of γ_a, where the distortion from the early statement and the mimicking work jointly against the voter.

The unknown specialization case. If the extent of competence is unknown, the type of equilibrium implemented depends on the distribution of γ_a and not on its specific realization. In this case the distortions are decreasing in γ_a but display non-monotonic patterns depending on the expected value of γ_a, in a similar fashion as described before.

If $E(\gamma_a) < \frac{2}{3}$, the incumbent promises p_a^I in the first period, no matter what γ_a is. Hence, two distortions are present. One is due to a misperceived probability that issue a is relevant and the other due to the inability of detecting the urgency of a when it is urgent.

[7] The Online Appendix contains plots of the expected welfare function as a function of γ_a for more parametric specifications.

If $E(\gamma_a) > \frac{2}{3}$, instead, some types of the incumbent speak in the first period, and when they do so, the challenger mimics with positive probability (either 1 or β depending on the value of $E(\gamma_a|\gamma_a < \Pi)$). As before, if the incumbent speaks in the first period he influences the perceived probability of relevance of issue a, and he destroys the voters' ability of detecting the urgency of a. Moreover, given that the incumbent speaks on a in the first period with positive probability even when a is not relevant, the voters are not able to recognize the urgency of a. In essence, all distortions are potentially present. However, for a given distribution, the probability of implementing the correct policy in the relevant issue is increasing in γ_a.

6. Discussion and Conclusion

This paper models a purely informational mechanism behind the incumbency advantage. We analyze a two-period electoral campaign characterized by two policy issues in which a specialized incumbent competes against an unspecialized, but possibly more competent challenger. Due to his government responsibilities, incumbent's statements can credibly attach importance to issues and influence the political agenda. The analysis of this novel rationale for the incumbency advantage delivers interesting predictions.

First, the incumbent can be advantaged even when he is objectively worse than the challenger. This goes against the hypothesis that the electoral selection process and the high quality of the incumbent are at the root of the incumbency advantage.

Second, the incumbent does not always have incentives to influence the debate. If his signal is very informative, he waits to make a statement and does not give the challenger the possibility to respond optimally to his information. Indeed, the returns to incumbency are decreasing in the quality of the incumbent. In other words, if his precise information makes re-election probable enough in itself, he chooses not to influence the agenda. This is in line with findings of the empirical literature which shows that stronger incumbents have smaller incentives to influence the elections (Aidt et al., 2011).

Finally, we show that even if the incumbent's incentives to distort the campaign are decreasing in the incumbent's quality, the probability of implementing the correct policy is not monotonically increasing in the degree of the incumbent's specialization. We show that having an incumbent who is objectively worse than the challenger may be better for the electorate than one who is partially more competent only on one of the issues. We are not aware of empirical studies who analyze this link between incumbent's quality and voters' welfare, but this is a testable implication of our model that can be investigated empirically in future work.

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A. Proofs

A.1. Discussion of Remark 1

The informational structure surrounding the voters allows the following two observations.

i. Since r is a public signal, all voters have the same beliefs about the relevant issue. Therefore, all voters vote on the same issue.

ii. On that issue, all voters receive an informative and independent signal v_j^i. With a continuum of voters, the signal received by the median voter corresponds to the true state of the world on issue j.

The candidates maximize the probability of being elected by maximizing the likelihood of making a statement that corresponds to the true state of the world on the issue that is perceived to be more relevant. Let the incumbent I be the row player, and the challenger C the column player. The challenger has four pure strategies: playing $p_j^C = 1$ regardless of the signal, playing $p_j^C = -1$ regardless of the signal, following his own signal on both issues, or going against his own signal on both issues. For the incumbent, consider the two possible choices of $p_j^I = \{-1, 1\}$ when his signal on issue j is $s_j = 1$. The matrix below shows the incumbent's expected probability of winning given his signal and given the four pure strategies of the challenger.

$s_j = 1$		Challenger			
		$p_j^C = 1$	$p_j^C = -1$	$p_j^C = t_j$	$p_j^C = -t_j$
Incumbent	$p_j^I = 1$	$\frac{1}{2}$	γ_j	$\frac{1}{6} + \frac{\gamma_j}{2}$	$\frac{1}{3} + \frac{\gamma_j}{2}$
	$p_j^I = -1$	$1 - \gamma_j$	$\frac{1}{2}$	$\frac{2}{3} - \frac{\gamma_j}{2}$	$\frac{5}{6} - \frac{\gamma_j}{2}$

Table 1: Incumbent's expected probability of winning.

Consider the probability of winning when $s_j = 1$ and both the incumbent and the challenger follow their signal,

$$\begin{aligned}\Pr(\text{win election}|s_j = 1) &= \Pr(t_j = 1|\omega_j = 1) \cdot Pr(\omega_j = 1|s_j = 1) \cdot \frac{1}{2} \\ &\quad + \Pr(t_j = -1|\omega_j = 1) \cdot Pr(\omega_j = 1|s_j = 1) \\ &\quad + \Pr(t_j = 1|\omega_j = -1) \cdot Pr(\omega_j = -1|s_j = 1) \cdot \frac{1}{2} \\ &= \frac{1}{6} + \frac{\gamma_j}{2}.\end{aligned}$$

Since $\gamma_j > \frac{1}{2}$, following his signal is optimal for the incumbent. The reasoning can be generalized to $s_j = -1$ and to the challenger's other choices.

A.2. Proof of Proposition 2

Proof. There are two possible cases, depending on the challenger's behavior.

i. If the challenger mimics the incumbent, then the probability of winning on that issue is $\frac{1}{2}$ regardless of what the incumbent promised.

ii. If there is a positive probability that the challenger does not mimic the incumbent, then promising $p_j^I = s_j$ yields a strictly higher payoff, as shown in the simultaneous case.

■

A.3. Proof of Proposition 3

Proof. Given that he does not affect which issue the election is decided upon, the challenger chooses his optimal promise on each issue j in order to maximize the probability of winning on that issue. This probability is equal to $\frac{1}{2}$ if the challenger mimics the incumbent by setting $p_j^C = p_j^I$.

If $t_j = p_j^I$ the challenger trivially sets $p_j^C = t_j = p_j^I$ and wins with probability $\frac{1}{2}$. If $t_j \neq p_j^I$ and the challenger does not mimic the incumbent, his probability of winning is

$$\Pr(\omega_j = t_j | t_j \neq s_j) = \frac{\delta_j(1-\gamma_j)}{\delta_j(1-\gamma_j) + \gamma_j(1-\delta_j)} \left(= \frac{2(1-\gamma_j)}{2-\gamma_j} \right),$$

which is greater than $\frac{1}{2}$ if $\gamma_j > \delta_j = \frac{2}{3}$. ■

A.4. Proof of Proposition 5

Proof. Given the almost uninformative signal on b, it is never optimal for the incumbent to speak early on this issue. The challenger never mimics what the incumbent says on b. Therefore the only effect of an early promise on b is to increase the probability that the voters base their decision on issue b, which lowers the incumbent's probability of winning. As a consequence, the only possible early announcement is p_a^I.

To characterize the equilibrium, we distinguish three different parametric regions.

$\boldsymbol{\gamma_a < \frac{2}{3}}$. Due to the low signal precision, the challenger does not mimic the incumbent after a promise in the first period. As a consequence, the incumbent will always promise something on a in the first period and thus increase the probability that the voters consider issue a.

$\boldsymbol{\frac{2}{3} < \gamma_a < \Xi}$. The incumbent is better informed about issue a than the challenger, but he still decides to compromise his probability of winning on issue a in order to increase the probability that the voters vote on issue a. As a consequence, he announces $p_a^I = s_a$ in the first period.

$\boldsymbol{\gamma_a} > \boldsymbol{\Xi}$. The incumbent's specialization is so strong that he would lose a significant advantage if he spoke in the first period and let the challenger mimic him. This is not counterweighted sufficiently by an increase of the probability that a is the decisive issue. Therefore he does not announce any policy in the first period.

When $\gamma_a > \frac{2}{3}$, the incumbent's probability of winning if he announces his policy on a in the first period is

$$\frac{k(2-z)-(1-z)}{k(2-z)}\frac{1}{2}+\frac{1-z}{k(2-z)}\frac{5}{12},$$

while his probability of winning if he does not announce his policy on a in the first period is

$$\frac{2k-1}{2k}\left(\frac{1}{6}+\frac{\gamma_a}{2}\right)+\frac{1}{2k}\frac{5}{12}.$$

By comparing the two expressions we can show that $\Xi = \frac{(4k-\frac{3}{2})(2-z)-(1-z)}{3(2k-1)(2-z)}$.

Notice that $\Xi > \frac{2}{3}$, while $\Xi < 1$ whenever $k > \frac{4-z}{4(2-z)} > \frac{1}{2}$. ■

A.5. Proof of Proposition 6

Proof. Let Π be the minimum of 1 and the solution to the implicit equation $\Pi = \frac{(8k-3)[2F(\Pi)-(2F(\Pi)-1)z]-2(1-z)F(\Pi)}{6(2k-1)[2F(\Pi)-(2F(\Pi)-1)z]}$. Notice that $\Pi > \frac{2}{3}$.

$\mathbf{E}\left(\boldsymbol{\gamma_a}\right) < \mathbf{\frac{2}{3}}$. Assume that the challenger mimics the incumbent if he speaks in the first period, and suppose that in equilibrium it is optimal for the incumbent to speak on a for some type $\bar{\gamma}_a$. In this case it is optimal for him to speak also for any $\gamma_a < \bar{\gamma}_a$. Let G be the set of types of the incumbent that speak on a in equilibrium in the first period, and let $F(G)$ be the probability that the incumbent's type belongs to the set G. Assume that $\bar{\gamma}_a \in G$. In this case the incumbent finds optimal to speak on a in the first period if

$$\frac{k[2F(G)-(2F(G)-1)z]-(1-z)F(G)}{k[2F(G)-(2F(G)-1)z]}\frac{1}{2}+\frac{(1-z)F(G)}{k[2F(G)-(2F(G)-1)z]}\frac{5}{12}$$

is greater than

$$\frac{2k-1}{2k}\left(\frac{1}{6}+\frac{\gamma_a}{2}\right)+\frac{1}{2k}\frac{5}{12}.$$

Consider now $\gamma_a \notin G$ such that $\gamma_a < \bar{\gamma}_a$. The first equation does not depend on the choice of type γ_a: even if type γ_a chooses to speak in the first period, and by doing so belongs to G, this does not affect the probability of G given the continuity of the probability distribution. This said, the difference between the two equations is decreasing in γ_a, therefore if the inequality holds for $\bar{\gamma}_a$ it holds also for every $\gamma_a < \bar{\gamma}_a$. The incumbent's choice is thus characterized by a threshold below which the incumbent will speak on a in the first period. We conclude that, if the unconditional expected value of γ_a is smaller than $\frac{2}{3}$, the challenger will never mimic the incumbent because the expected precision of the incumbent given that he speaks in the first period will never be greater than $\frac{2}{3}$, given that $E(\gamma_a) < \frac{2}{3}$. As a consequence, promising s_a in the first period will always be optimal for the incumbent, since it will induce a gain in the probability that the voters look at issue a without any loss in terms of probability of winning on issue a.

$\mathbf{(1-z)E(\gamma_a|\gamma_a < \Pi) + zE\,(\gamma_a) > \frac{2}{3}}$. The incumbent speaks in the first period for any $\gamma_a < \Pi$ even if the challenger mimics him. As we proved above, the incumbent's choice in equilibrium is characterized by a threshold: if it is optimal for the incumbent to speak on a for some type $\bar{\gamma}_a$, it is also optimal for him to speak for any $\gamma_a < \bar{\gamma}_a$. Therefore the threshold Π, if an threshold in $[0, 1]$ exists, is such that the incumbent's probability of winning if he announces his policy on a in the first period when the challenger mimics him,

$$\frac{k[2F(\Pi) - (2F(\Pi) - 1)z] - (1-z)F(\Pi)}{k[2F(\Pi) - (2F(\Pi) - 1)z]}\frac{1}{2} + \frac{(1-z)F(\Pi)}{k[2F(\Pi) - (2F(\Pi) - 1)z]}\frac{5}{12},$$

equals the incumbent's probability of winning if he does not announce anything in the first period,

$$\frac{2k-1}{2k}\left(\frac{1}{6} + \frac{\gamma_a}{2}\right) + \frac{1}{2k}\frac{5}{12}.$$

It is always the case that the incumbent promises $p_a^I = s_a$ in the first period when $\gamma_a < \Pi$ as defined above. With this behavior of the incumbent and the expected precision of the incumbent given that he speaks in the first period, $(1-z)E(\gamma_a|\gamma_a < \Pi) + zE\,(\gamma_a)$, being larger than the challenger's precision, the challenger always mimics the incumbent when p_a^I is promised in the first period. As a consequence, the incumbent will wait until the second period whenever $\gamma_a > \Pi$.

$\mathbf{(1-z)E(\gamma_a|\gamma_a < \Pi) + zE\,(\gamma_a) < \frac{2}{3}}$ **and** $\mathbf{E(\gamma_a) > \frac{2}{3}}$. Notice that this is possible only when $\Pi < 1$. We analyze the situation by considering the challenger's possible strategies, and the incumbent's best responses to them:

i. If the challenger never mimics the incumbent when he makes a promise on a in the first period, the incumbent announces $p_a^I = s_a$ in the first period for any value of γ_a. However, it is optimal for the challenger to mimic the incumbent, given that $E(\gamma_a) > \frac{2}{3}$.

ii. If the challenger always mimics the incumbent when he makes a promise on a in the first period, the incumbent announces $p_a^I = s_a$ in the first period for any $\gamma_a < \Pi$. However, the challenger has no incentive to mimic the incumbent, given that the expected precision of the incumbent signal is $(1-z)E(\gamma_a|\gamma_a < \Pi) + zE(\gamma_a) < \frac{2}{3}$.

iii. If the challenger mimics the incumbent with probability $0 < \beta < 1$, the incumbent has an incentive to promise $p_a^I = s_a$ in the first period as long as the incumbent's probability of winning by announcing $p_a^I = s_a$ in the first period is greater than his probability of winning by being silent in the first period. Let G be the set of types who speak in the first period. The probability of winning by being announcing $p_a^I = s_a$ in the first period is, for an incumbent with type γ_a,

$$\frac{k[2F(G)-(2F(G)-1)z]-(1-z)F(G)}{k[2F(G)-(2F(G)-1)z]}\left(\beta\frac{1}{2}+(1-\beta)\left(\frac{1}{6}+\frac{\gamma_a}{2}\right)\right)$$
$$+\frac{(1-z)F(G)}{k[2F(G)-(2F(G)-1)z]}\frac{5}{12},$$

while his probability of winning by being silent in the first period is

$$\frac{2k-1}{2k}\left(\frac{1}{6}+\frac{\gamma_a}{2}\right)+\frac{1}{2k}\frac{5}{12}.$$

$\boldsymbol{\beta < \frac{z}{2F(G)(2k-1)(1-z)+z}}$. The incumbent always speaks in the first period regardless of his type γ_a. We can show this by noticing that announcing s_a in the first period is optimal (meaning that the first of the above equations is larger than the second one) for the following values of β.

$$\begin{cases} \beta < \frac{(6\gamma_a-3)z}{(6\gamma_a-4)[2k(2F(G)-(2F(G)-1)z)-2(1-z)F(G)]} & \text{if } \gamma_a > \frac{2}{3}, \\ \beta \in [0,1] & \text{otherwise.} \end{cases}$$

Notice that $\frac{z}{2F(G)(2k-1)(1-z)+z} < \frac{(6\gamma_a-3)z}{(6\gamma_a-4)[2k(2F(G)-(2F(G)-1)z)-2(1-z)F(G)]}$ for any $\gamma_a \in \left[\frac{2}{3}, 1\right]$. Therefore, it is optimal for the incumbent to speak in the first period for any value of γ when $\beta < \frac{z}{2F(G)(2k-1)(1-z)+z}$.

$\boldsymbol{\beta > \frac{z}{2F(G)(2k-1)(1-z)+z}}$. As before, the optimal strategy for the incumbent is characterized by a threshold that now depends on β, $\Pi(\beta)$.

The effect of γ_a on the difference of the two equations is

$$\frac{k(2F(G)-(2F(G)-1)z)-(1-z)F(G)}{k(2F(G)-(2F(G)-1)z)}\frac{1-\beta}{2}-\frac{2k-1}{2k}\frac{1}{2},$$

which is negative under the above condition on β. Therefore, as long as $\beta > \frac{z}{2F(G)(2k-1)(1-z)+z}$, the incumbent's behavior is characterized by a threshold.

With our parametric assumptions the equilibrium must arise with $\beta > \frac{z}{2F(G)(2k-1)(1-z)+z}$, because in this case no equilibrium exists in which all types of incumbents speak in the first period. Therefore the probability of winning for an incumbent with type γ_a who speaks in the first period can be rewritten as

$$\frac{k[2F(\Pi(\beta)) - (2F(\Pi(\beta)) - 1)z] - (1-z)F(\Pi(\beta))}{k[2F(\Pi(\beta)) - (2F(\Pi(\beta)) - 1)z]}\left(\beta\frac{1}{2} + (1-\beta)\left(\frac{1}{6} + \frac{\gamma_a}{2}\right)\right)$$
$$+\frac{(1-z)F(\Pi(\beta))}{k[2F(\Pi) - (2F(\Pi) - 1)z]}\frac{5}{12},$$

while his probability of winning by being silent in the first period is

$$\frac{2k-1}{2k}\left(\frac{1}{6} + \frac{\gamma_a}{2}\right) + \frac{1}{2k}\frac{5}{12}.$$

Equating the two gives us the following implicit equation that defines the threshold as a function of β for $\beta > \frac{z}{2F(G)(2k-1)(1-z)+z}$. The threshold can be rewritten as:

$$\Pi(\beta) = \begin{cases} \frac{(8\beta k-3)[2F(\Pi(\beta))-(2F(\Pi(\beta))-1)z]+2F(\Pi(\beta))(3-4\beta)(1-z)}{(12\beta k-6)[2F(\Pi(\beta))-(2F(\Pi(\beta))-1)z]+12F(\Pi(\beta))(1-\beta)(1-z)} & \text{if } \beta > \frac{z}{2F(G)(2k-1)(1-z)+z}, \\ 1 & \text{otherwise.} \end{cases}$$

Notice that $\Pi(\beta) = \Pi$ when $\beta = 1$ and $(1-z)E(\gamma_a|\gamma_a < \Pi(1)) + zE(\gamma_a) < \frac{2}{3}$. Moreover, $(1-z)E\left(\gamma_a|\gamma_a < \Pi(\frac{z}{2F(G)(2k-1)(1-z)+z})\right) + +zE(\gamma_a) = E(\gamma_a) > \frac{2}{3}$.

In this region, for a given $\Pi(\beta)$ it is optimal for the challenger to randomize with probability β if and only if $(1-z)E(\gamma_a|\gamma_a < \Pi(\beta)) + zE(\gamma_a) = \frac{2}{3}$, so that the challenger is indifferent between mimicking and not mimicking the incumbent. Given that $E(\gamma_a|\gamma_a < \Pi(\beta))$ is continuous[8] and given that $(1-z)E(\gamma_a|\gamma_a < \Pi(1)) + +zE(\gamma_a) < \frac{2}{3}$, and $(1-z)E\left(\gamma_a|\gamma_a < \Pi(\frac{z}{2F(G)(2k-1)(1-z)+z})\right) + +zE(\gamma_a) > \frac{2}{3}$, there exists at least one $\beta \in \left(\frac{z}{2F(G)(2k-1)(1-z)+z}, 1\right)$ such that $(1-z)E(\gamma_a|\gamma_a < \Xi(\beta)) + +zE(\gamma_a) = \frac{2}{3}$.

[8]This is implied by $f(\gamma_a)$ being a continuous density function.

Therefore there is at least one equilibrium in which the incumbent promises $p_a^I = s_a$ in the first period for any $\gamma_a < \Pi'$, such that $(1-z)E(\gamma_a|\gamma_a < \Pi') + +zE(\gamma_a) = \frac{2}{3}$, and the challenger mimics him with probability β such that $\Pi(\beta) = \Pi'$. Moreover all the equilibria in this region have this same structure.

■

B. Distortions arising from political specialisation

B.1. Benchmark

The probability of voting such that the correct policy on the relevant issue is implemented in our benchmark case is:

$$\begin{aligned} Pr(\omega_{rel} = p_{rel}^*) \;\; = \;\; & z\left\{E(r)(1-(1-\gamma_a)(1-\delta_a)) + E(1-r)(1-(1-\gamma_b)(1-\delta_b))\right\} \\ & +(1-z)\left\{\Pr\left(r > \frac{1}{2}\right)\left[E\left(r|r > \frac{1}{2}\right)(1-(1-\gamma_a)(1-\delta_a))\right.\right. \\ & + \left. E\left(1-r|r > \frac{1}{2}\right)\left(\frac{1+\gamma_a-\delta_a}{2}\gamma_b + \frac{1-\gamma_a+\delta_a}{2}\delta_b\right)\right] \\ & + \Pr\left(r < \frac{1}{2}\right)\left[E\left((1-r)|r < \frac{1}{2}\right)(1-(1-\gamma_b)(1-\delta_b))\right. \\ & + \left.\left. E\left(r|r < \frac{1}{2}\right)\left(\frac{1+\gamma_b-\delta_b}{2}\gamma_a + \frac{1-\gamma_b+\delta_b}{2}\delta_a\right)\right]\right\}. \end{aligned}$$

In fact, with probability z the issue is urgent and the incumbent is forced to act in the first period. The voters recognize that the issue must be relevant and vote accordingly. With probability $1-z$ the issue is not relevant. In this case the voters' behavior depends on the realization of the public signal r. If $r > \frac{1}{2}$, the voters' choice is based on issue a; they will be able to choose a candidate with the correct proposed policy with probability $1-(1-\gamma_a)(1-\delta_a)$. Therefore, this candidate will be elected that offers the best policy on a. With probability $1-r$, however, the relevant issue is b. If the incumbent is elected (which happens with probability $\frac{1+\gamma_a-\delta_a}{2}$) the probability of having the correct policy on b is γ_b; if the challenger is elected (with probability $\frac{1-\gamma_a+\delta_a}{2}$) the probability of having a correct policy on b is δ_b. If $r < \frac{1}{2}$, the voters base their choice on issue b and the probability of voting for the correct policy is symmetric.

B.2. Analysis of the distortions

We separately consider the three parametric regions that are relevant for the equilibrium analysis.

$\boldsymbol{\gamma_a} > \boldsymbol{\Xi}$. If the incumbent's competence is such that he only speaks on urgent issues and then gets mimicked by the challenger, the probability of electing a candidate who proposes the correct policy on the relevant issue is,

$$
\begin{aligned}
Pr(\omega_{rel} = p^*_{rel}) \quad = \quad & z\left\{E\left(r\right)\gamma_a + E\left(1-r\right)\left(1-(1-\gamma_b)(1-\delta_b)\right)\right\} \\
& +(1-z)\left\{\Pr\left(r > \frac{1}{2}\right)\left[E\left(r|r > \frac{1}{2}\right)(1-(1-\gamma_a)(1-\delta_a))\right.\right. \\
& + \left. E\left(1-r|r > \frac{1}{2}\right)\left(\frac{1+\gamma_a-\delta_a}{2}\gamma_b + \frac{1-\gamma_a+\delta_a}{2}\delta_b\right)\right] \\
& + \Pr\left(r < \frac{1}{2}\right)\left[E\left((1-r)|r < \frac{1}{2}\right)(1-(1-\gamma_b)(1-\delta_b))\right. \\
& + \left.\left. E\left(r|r < \frac{1}{2}\right)\left(\frac{1+\gamma_b-\delta_b}{2}\gamma_a + \frac{1-\gamma_b+\delta_b}{2}\delta_a\right)\right]\right\}.
\end{aligned}
$$

The incumbent only speaks when the issue is urgent, similar to the benchmark. If this issue is a, the high competence γ_a makes the challenger mimic the incumbent, thus reducing the probability that a candidate with the right policy is up for election from $1-(1-\gamma_a)(1-\delta_a)$ to γ_a.

$\boldsymbol{\gamma_a < \frac{2}{3}}$. If the incumbent always speaks early on issue a and does not get mimicked, the expected welfare becomes

$$
\begin{aligned}
Pr(\omega_{rel} = p^*_{rel}) \quad = \quad & z\left\{E\left(1-r\right)\left(1-(1-\gamma_b)(1-\delta_b)\right)\right\} \\
& +(1-z+z\cdot E(r))\left\{\Pr\left(r > \frac{1}{2}\right)\left[E\left(r|r > \frac{1}{2}\right)[1-(1-\gamma_a)(1-\delta_a)]\right.\right. \\
& + \left. E\left(1-r|r > \frac{1}{2}\right)\left(\frac{1+\gamma_a-\delta_a}{2}\gamma_b + \frac{1-\gamma_a+\delta_a}{2}\delta_b\right)\right] \\
& +\Pr\left(\frac{1-z}{2-z} < r \leq \frac{1}{2}\right)\left[E\left(r|\frac{1-z}{2-z} < r \leq \frac{1}{2}\right)[1-(1-\gamma_a)(1-\delta_a)]\right. \\
& + \left. E\left(1-r|\frac{1-z}{2-z} < r \leq \frac{1}{2}\right)\left(\frac{1+\gamma_a-\delta_a}{2}\gamma_b + \frac{1-\gamma_a+\delta_a}{2}\delta_b\right)\right] \\
& +\Pr\left(r \leq \frac{1-z}{2-z}\right)\left[E\left(1-r|r \leq \frac{1-z}{2-z}\right)[1-(1-\gamma_b)(1-\delta_b)]\right. \\
& + \left.\left. E\left(r|r \leq \frac{1-z}{2-z}\right)\left(\frac{1+\gamma_b-\delta_b}{2}\gamma_a + \frac{1-\gamma_b+\delta_b}{2}\delta_a\right)\right]\right\}.
\end{aligned}
$$

The incumbent makes an early statement on issue a. This results in two distortions due to the voters inference regarding the relevance and urgency of the issue. Since the incumbent only speaks on a, urgency is recognized on issue b. Issue a, however, cannot be identified as urgent when it is. In this case, the voter is harmed since they do not gain certainty about the relevant issue, as they do in the benchmark case. Furthermore, the probability that issue a is the relevant one is distorted. For values of r between $\frac{1-z}{2-z}$ and $\frac{1}{2}$ the voters vote on issue a, although b is more likely to be the relevant issue.

$\boldsymbol{\frac{2}{3} < \gamma_a < \Xi}$. If the challenger speaks early and is mimicked by the challenger, the expected welfare becomes

$$
\begin{aligned}
Pr(\omega_{rel} = p^*_{rel}) \quad = \quad & z\left\{E\left(1-r\right)\left(1-(1-\gamma_b)(1-\delta_b)\right)\right\} \\
& +(1-z+z\cdot E(r))\left\{\Pr(r>\frac{1}{2})\left[E(r|r>\frac{1}{2})[\gamma_a]+E(1-r|r>\frac{1}{2})\frac{\gamma_b+\delta_b}{2}\right]\right. \\
& +\Pr(\frac{1-z}{2-z}<r\leq\frac{1}{2})\left[E(r|\frac{1-z}{2-z}<r\leq\frac{1}{2})[\gamma_a]+E(1-r|\frac{1-z}{2-z}<r\leq\frac{1}{2})\frac{\gamma_b+\delta_b}{2}\right] \\
& \left.+\Pr(r\leq\frac{1-z}{2-z})\left[E(1-r|r\leq\frac{1-z}{2-z})[1-(1-\gamma_b)(1-\delta_b)]+E(r|r\leq\frac{1-z}{2-z})\frac{\gamma_a+\delta_a}{2}\right]\right\}.
\end{aligned}
$$

In this case the incumbent makes an early statement and gets mimicked by the challenger. On top of the distortions present in the previous case, the imitation reduces the probability that a candidate who proposes the right policy is available, as in the first range considered.